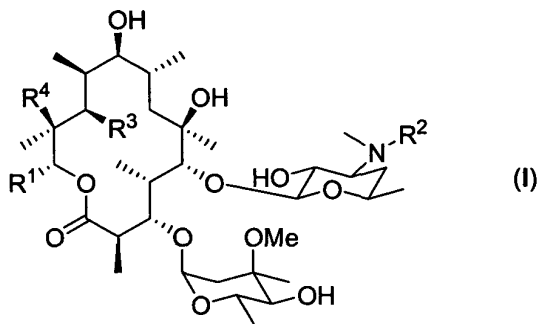


CLAIMS

What is claimed is:

1. A compound having the formula (I)



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and the pharmaceutically acceptable salts, esters, and prodrug forms thereof, wherein

- R^1 is substituted or unsubstituted C_1 - C_{10} alkyl, substituted or unsubstituted C_2 - C_{10} alkenyl, substituted or unsubstituted C_2 - C_{10} alkynyl, substituted or unsubstituted aryl, or substituted or unsubstituted heterocyclo;
- R^2 is H, substituted or unsubstituted C_1 - C_5 alkyl, substituted or unsubstituted C_2 - C_5 alkenyl, substituted or unsubstituted C_2 - C_5 alkynyl, substituted or unsubstituted aryl, or substituted or unsubstituted heterocyclo;
- R^3 is H or OH; and
- R^4 is H or OH, or R^3 and R^4 taken together form $O-(C=O)-O$;
- with the proviso that when (a) R^1 is ethyl and (b) R^3 is OH or R^3 and R^4 taken together form $O-C(=O)-O$, then R^2 is not H or methyl.

2. A compound according to Claim 1 wherein
- R^1 is substituted or unsubstituted C_1 - C_{10} alkyl, substituted or unsubstituted C_2 - C_{10} alkenyl, substituted or unsubstituted C_2 - C_{10} alkynyl, substituted or unsubstituted aryl, or substituted or unsubstituted heterocyclo;

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R² is H, ethyl, propyl, isopropyl, or 2-butyl; and

R³ and R⁴ are OH,

with the proviso that when R¹ is ethyl, then R² is not H or methyl.

3. A compound according to Claim 1 wherein:

5 R¹ is substituted or unsubstituted C₁-C₅ alkyl;

R² is H, substituted or unsubstituted C₁-C₅ alkyl, substituted or unsubstituted C₂-C₅ alkenyl, or substituted or unsubstituted C₂-C₅ alkynyl; and

R³ and R⁴ are OH,

with the proviso that when R¹ is ethyl, then R² is not H or methyl.

10 4. A compound according to Claim 1 wherein:

R¹ is ethyl;

R² is ethyl, propyl, isopropyl, or 2-butyl; and

R³ and R⁴ are OH.

5. A compound according to Claim 1 wherein:

15 R¹ is substituted ethyl;

R² is H, substituted or unsubstituted C₁-C₅ alkyl, substituted or unsubstituted C₂-C₅ alkenyl, or substituted or unsubstituted C₂-C₅ alkynyl; and

R³ and R⁴ are OH.

6. A compound according to Claim 1 wherein:

20 R¹ is substituted ethyl;

R² is H, ethyl, propyl, isopropyl, or 2-butyl; and

R³ and R⁴ are OH.

7. A compound according to Claim 1 wherein:

R¹ is propyl;

R² is H, substituted or unsubstituted C₁-C₅ alkyl, substituted or unsubstituted C₂-C₅ alkenyl, or substituted or unsubstituted C₂-C₅ alkynyl; and
 R³ and R⁴ are OH.

8. A compound according to claim 1, wherein

5 R³ and R⁴ are independently H or OH;

R¹ is selected from the group consisting of ethyl, 2-fluoroethyl, and 1-propyl; and

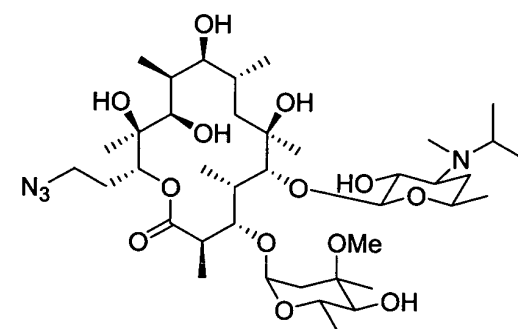
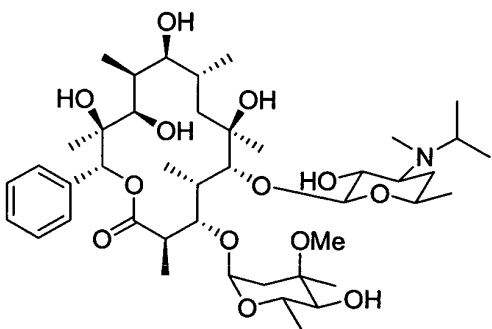
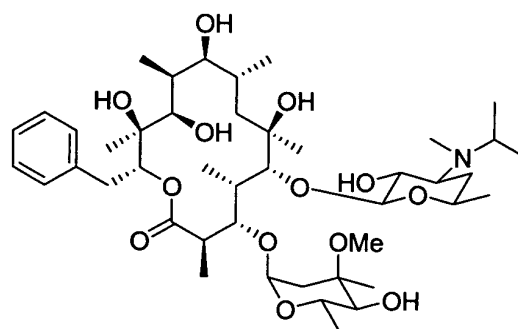
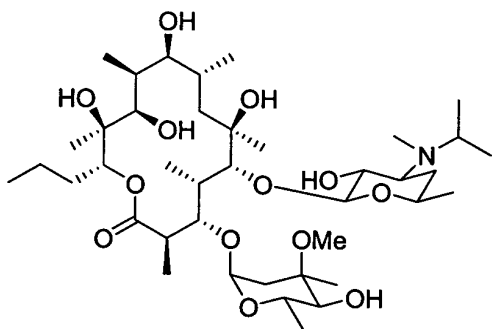
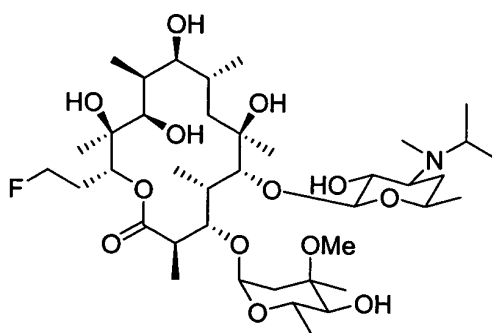
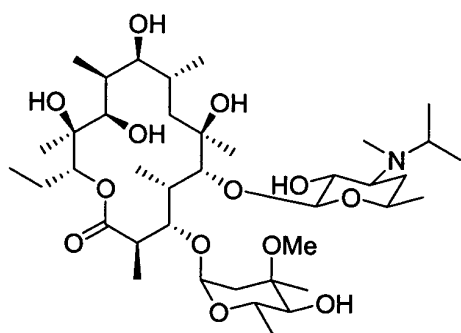
R² is selected from the group consisting of methyl, ethyl, isopropyl, and 2-butyl;
 with the proviso that when R¹ is ethyl and R³ is OH, then R² is not methyl.

9. A compound according to claim 1, wherein R¹, R², R³ and R⁴ are according

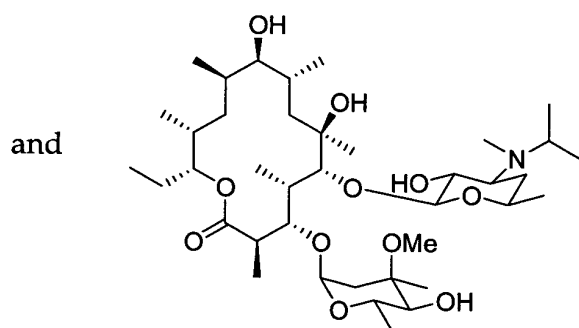
10 to the combinations set forth in the table below:

R ¹	R ²	R ³	R ⁴
CH ₃ CH ₂	CH(CH ₃) ₂	OH	OH
FCH ₂ CH ₂	CH ₃	OH	OH
FCH ₂ CH ₂	CH ₂ CH ₃	OH	OH
FCH ₂ CH ₂	CH(CH ₃) ₂	OH	OH
CH ₃ CH ₂ CH ₂	CH ₃	OH	OH
CH ₃ CH ₂ CH ₂	CH(CH ₃) ₂	OH	OH
CH ₃ CH ₂ CH ₂	C(CH ₃)CH ₂ CH ₃	OH	OH
CH ₃ CH ₂	CH(CH ₃) ₂	H	H

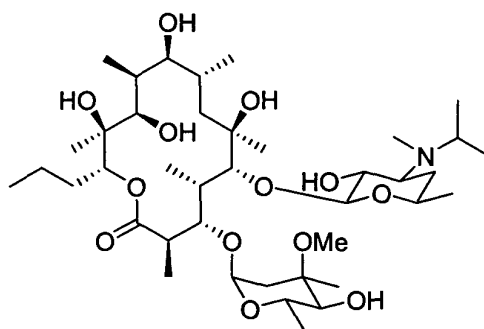
10. A compound according to Claim 1 selected from the group consisting of:



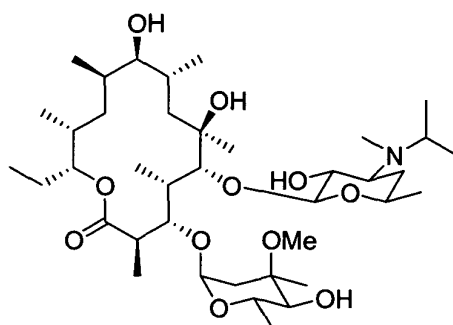
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11. A compound according to claim 1, having a structure of the formula:



12. A compound according to claim 1, having a structure of the formula:



13. A pharmaceutical composition comprising a compound according to
5 Claim 1 together with a pharmaceutically acceptable carrier.
14. A method for the treatment of a disorder of gastric motility in a patient
suffering therefrom, comprising administering to the patient a therapeutically
effective dose of a composition of Claim 1.
15. The use of a compound according to claim 1 for the preparation of a
10 medicament for treating a disorder of gastric disorder in a patient.
16. A recombinant host cell engineered to produce 11-deoxyerythromycins,
which host cell is capable of expressing a modified version of the DEBS suite of
genes (*eryAI*, *eryAII*, and *eryAIII*) in which the *eryAI* gene has been engineered by
replacement of the ketoreductase domain in module 2 thereof with a cassette con-

taining a dehydratase domain, an enoylreductase domain, and a ketoreductase domain.

17. A recombinant host cell according to claim 16, derived from *Saccharopolyspora erythraea* K24-1/159-44.

5 18. A method of producing 11-deoxyerythromycins, comprising culturing a recombinant host cell that is capable of expressing a modified version of the DEBS suite of genes (*eryAI*, *eryAII*, and *eryAIII*) in which the *eryAI* gene has been engineered by replacement of the ketoreductase domain in module 2 thereof with a cassette containing a dehydratase domain, an enoylreductase domain, and a keto-
10 reductase domain and optionally recovering the 11-deoxyerythromycins produced.

19. A method of claim 18, wherein the host cell is derived from *Saccharopolyspora erythraea* K24-1/159-44.

20. A method according to claim 18, wherein the 11-deoxyerythromycin is 11-deoxyerythromycin B.

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